

***Calochortus rustvoldii* Callahan (Liliaceae), A new species from Los Angeles and Ventura Counties, California**

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ABSTRACT

A new species of *Calochortus*, *C. rustvoldii* Callahan is described from Los Angeles and Ventura counties, California, and a comparison is made with *Calochortus obispoensis* and the *Calochortus C. weedii* complex. Published on-line www.phytologia.org *Phytologia* 97(4): 282-285 (Oct 1, 2015). ISSN 030319430.

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On 7 November 2005, while botanizing south of Placerita Canyon Road, Los Angeles County, CA, Ed Rustvold collected some bulbs in steep chaparral terrain east of Santa Clarita. It was well past the flowering season so he was unable to identify the species. As a botanist and grower of geophytes, Rustvold suspected that the bulbs might be *Calochortus weedii* because the site was within the range of that species. The following year, after the plants flowered in his garden, he realized that it might be an undescribed species. This led him to send bulbs to me, in addition to Sean Lake of Navato, California, an avid hybridizer of *Calochortus*.

After growing the bulbs, I compared my specimens with other putatively, closely related species and determined they exhibited intermediate morphology between *Calochortus obispoensis* and yet other taxa within the *C. weedii* complex (*C. fimbriatus*, *C. plummerae*, *C. weedii* and varieties).

The most striking trait shared between Rustvold's specimens and *C. obispoensis* is the perianth, which is somewhat rotate and has flat perianth segments. Conversely, the perianth of *C. weedii* is campanulate (cup shaped), with petals that are broader at the distal end. In addition to the rotate perianth, which is uncommon in the genus, the other obvious feature in common between *C. obispoensis* and *C. rustvoldii* are the sepals which are longer than the petals. The petals of *C. rustvoldii* differ from *C. obispoensis*, however, in that they are broadly wedge-shaped with serrate to fimbriate margins; in contrast, the petals of *C. obispoensis* are much reduced, taper distally to a point, and exhibit very long trichomes along the margin. In commonality, the bulbs of *C. weedii*, *C. obispoensis* and *C. rustvoldii* all share the feature of having coarse reticulate hairs, thus grouping these species in Ownbey's (1940) Section III of Cyclobothera.

On 1 June 2013 Ed Rustvold, Sean Lake and I collected several more bulbs at the site of Rustvold's original discovery. No plants were in flower. As such, my description is based on cultivated plants from the wild-collected bulbs. Rustvold and Lake later collected bulbs off Goodenough Road, north of Fillmore in Ventura County, California. These collections, when later grown were found to be *C. rustvoldii*. There is an approximate air distance of 23 miles, (37 km) between the Goodenough Road and Placerita Canyon Road sites. Several other *Calochortus* species share the same habitat zone, including *C. plummerae*, *C. fimbriatus*, and *C. clavatus* var. *clavatus*.